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BSI Standards Publication

Sustainability criteria for the production of biofuels and bioliquids for energy applications — Principles, criteria, indicators and verifiers

Part 1: Terminology

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National foreword

This British Standard is the UK implementation of EN 16214-1:2012.

The UK participation in its preparation was entrusted to Technical Committee PTI/20, Sustainability of bioenergy.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Critères de durabilité de la production des biocarburants et bioliquides pour des applications énergétiques - Principes, critères, indicateurs et vérificateurs - Partie 1: Terminologie

Nachhaltigkeitskriterien für die Herstellung von Biokraftstoffen und flüssigen Biobrennstoffen für Energieanwendungen - Grundsätze, Kriterien, Indikatoren und Prüfer - Teil 1: Terminologie

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN 16214-1:2012) has been prepared by Technical Committee CEN/TC 383 “Sustainably produced biomass for energy applications”, the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2013, and conflicting national standards shall be withdrawn at the latest by February 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This European Standard comprises the following parts:

– EN 16214-1, *Sustainability criteria for the production of biofuels and bioliquids for energy applications — Principles, criteria, indicators and verifiers — Part 1: Terminology*;

– prEN 16214-2, *Sustainability criteria for the production of biofuels and bioliquids for energy applications — Part 2: Conformity assessment including chain of custody and mass balance*;

– EN 16214-3, *Sustainability criteria for the production of biofuels and bioliquids for energy applications — Principles, criteria, indicators and verifiers — Part 3: Biodiversity and environmental aspects related to nature protection purposes*;

– prEN 16214-4, *Sustainability criteria for the production of biofuels and bioliquids for energy applications — Part 4: Calculation methods of the greenhouse gas emission balance using a life cycle analysis*.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Directive 2009/28/EC [1] of the European Commission on the promotion of the use of energy from renewable sources, referred to as the Renewable Energy Directive (RED), incorporates an advanced binding sustainability scheme for biofuels and bioliquids for the European market. The RED contains binding sustainability criteria to greenhouse gas savings, land with high biodiversity value, land with high carbon stock and agro-environmental practices. Several articles in the RED present requirements to European Member States and to economic operators in Europe. Non-EU countries may have different requirements and criteria on, for instance, the GHG emission reduction set-off.

The sustainability criteria are also mandated in Directive 98/70/EC [14] relating to the quality of petrol and diesel fuels, via the amending Directive 2009/30/EC [2] (as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions). Directive 98/70/EC is referred to as the Fuels Quality Directive (FQD).

In May 2009, the European Commission requested CEN to initiate work on standard(s) on:

— the implementation, by economic operators, of the mass balance method of custody chain management;

— the provision, by economic operators, of evidence that the production of raw material has not interfered with nature protection purposes, that the harvesting of raw material is necessary to preserve grassland's grassland status, and that the cultivation and harvesting of raw material does not involve drainage of previously undrained soil;

— the auditing, by Member States and by voluntary schemes of information submitted by economic operators.

Both the EC and CEN agreed that these may play a role in the implementation of the EU biofuel and bioliquid sustainability scheme. In the Communication from the Commission on the practical implementation of the EU biofuels and bioliquids sustainability scheme and on counting rules for biofuels (2010/C 160/02, [26]), awareness of the CEN work is indicated.

It is widely accepted that sustainability at large encompasses environmental, social and economic aspects. The European Directives make mandatory the compliance of several sustainability criteria for biofuels and bioliquids. This European Standard has been developed with the aim to assist EU Member States and economic operators with the implementation of EU biofuel and bioliquids sustainability requirements mandated by the European Directives. This European Standard is limited to certain aspects relevant for a sustainability assessment of biomass produced for energy applications. Therefore compliance with this standard or parts thereof alone does not substantiate claims of the biomass being produced sustainably.

Where applicable, the parts of this standard contain at the end an annex that informs the user of the link between the requirements in the European Directive and the requirements in the CEN Standard.

1 Scope

This European Standard defines the terminology to be used in the field of sustainability criteria for the production of biofuels and bioliquids for energy applications. This European Standard specifically considers some relevant terms and definitions used in the European Commission Directive 2009/28/EC [1], referred to as Renewable Energy Directive (RED), and in the European Commission Directive 2009/30/EC [2] referred to as Fuel Quality Directive (FQD), or in other European regulations.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1
accreditation
third-party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry our specific conformity assessment tasks

[SOURCE: EN ISO/IEC 17000:2004, 5.6]

2.2
accreditation body
authoritative body that performs accreditation

NOTE 1 to entry: The authority of an accreditation body is generally derived from government.

[SOURCE: EN ISO/IEC 17000:2004, 2.6]

2.3
actual value
greenhouse gas emission or greenhouse gas emission savings for some or all of the steps of a specific biofuel production process calculated in accordance with a methodology compliant with applicable regulations

NOTE 1 to entry: As per 2009/28/EC [1].

NOTE 2 to entry: See also default value (2.27), disaggregated default value (2.28), typical value (2.80).

2.4
agro-biodiversity
component of biodiversity that contributes to food and agriculture production, encompassing within species, species and ecosystem diversity

NOTE 1 to entry: Derived from FAO Glossary WFE 2005.

2.5
allocation
partitioning the input or output flows of a process or a product system between the product system under study and one or more other product systems

[SOURCE: EN ISO 14040:2006, 2.17]

2.6
area for nature protection purposes
area designated by law or other equivalent competent legal authority for the long-term conservation of nature with associated ecosystem services and biodiversity values

NOTE 1 to entry: Within MCPFE classification long-term is minimum 20 years for forests and can be different in other ecosystems and regions [5].

NOTE 2 to entry: Some clauses or elements of classification schemes might fall out under this definition, for example IUCN scheme [6].

2.7
audit
systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which the criteria are fulfilled

NOTE 1 to entry: Internal audits, sometimes called first-party audits, are conducted by, or on behalf of, the organization itself for management review and other internal purposes, and may form the basis for an organization's self-declaration of conformity. In many cases, particularly in smaller organizations, independence can be demonstrated by the freedom from responsibility for the activity being audited.

NOTE 2 to entry: Adapted from EN ISO 19011:2011 [7].

2.8
biofuel
liquid or gaseous fuel for transport produced from biomass

NOTE 1 to entry: As per 2009/28/EC [1].

2.9
biofuel production
transformation of biomass or of an intermediate product derived from biomass into a biofuel

2.10
biofuel producer
organization or unit responsible for the production of the biofuel

NOTE 1 to entry: Adapted from EN 14588:2010 [8].

2.11
bioliquid
liquid fuel for energy purposes other than for transport, including electricity and heating and cooling, produced from biomass

NOTE 1 to entry: As per 2009/28/EC [1].

NOTE 2 to entry: Includes viscous liquids such as waste cooking oil, animal fats, palm oil, crude tall oil and tall oil pitch.

2.12
bioliquid production
transformation of biomass or of an intermediate product derived from biomass into a bioliquid

2.13
biomass
biodegradable fraction of products, waste and residues from biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste

NOTE 1 to entry: As per 2009/28/EC [1].

NOTE 2 to entry: The following definition is used in EN 14588:2010 [8]: material of biological origin excluding material embedded in geological formations and/or transformed to fossil.

2.14
blending
process of defined intentional mixing of a biofuel or a bioliquid with a fossil fuel or of a biofuel with a biofuel or a bioliquid with a bioliquid

NOTE 1 to entry: See also mixture (2.54).

2.15
certificate
attestation document issued by an independent third-party certification body

[SOURCE: ISO 22222:2005, 2.2]

2.16
chain of custody
system by which a connection is made between information or claims concerning raw materials or intermediate products and claims concerning final products, including all the stages from the raw material production up until the release of the final product for consumption

2.17
combined heat and power
CHP
simultaneous generation in one process of thermal energy and electrical and/or mechanical energy

NOTE 1 to entry: As per 2004/8/EC [10].

NOTE 2 to entry: Synonymous term: cogeneration.

2.18
conformity assessment
set of procedures or activities intended to provide demonstration that specified requirements relating to a product, process, system, person or body are fulfilled

NOTE 1 to entry: Adapted from EN ISO/IEC 17000:2004 [3].

NOTE 2 to entry: See also first-party conformity assessment activity (2.32), second-party conformity assessment activity (2.71), third-party conformity assessment activity (2.79).

2.19
conformity assessment body
body that performs conformity assessment services

NOTE 1 to entry: An accreditation body is not a conformity assessment body.

[SOURCE: EN ISO/IEC 17000:2004, 2.5]

2.20
consignment
quantity of unfinished or finished product, consisting of one or more batches of the same sustainability characteristics, which is transferred from one economic operator to another one at the same time.

NOTE 1 to entry: Transfer from/to two economic operators involves two consignments.

2.21
continuously forested area
land spanning more than one hectare with trees higher than five metres and a canopy cover of more than 30 %, or trees able to reach those thresholds in situ

NOTE 1 to entry: As per 2009/28/EC [1].

NOTE 2 to entry: Excludes land that is predominantly under agricultural or urban land use.

NOTE 3 to entry: Land under agricultural use in this context refers to tree stands in agricultural production systems, such as fruit tree plantations, oil palm plantations, short rotation coppice and, agroforestry systems when crops are grown under tree cover.

NOTE 4 to entry: Includes managed forests with harvests and re-growth at intervals.

2.22
conversion
chemical, biological or physical process whereby biomass or an intermediate product is converted into a finished biofuel/bioliquid or into an intermediate product

2.23
co-processing
simultaneous conversion of feedstocks of different origins e.g. biomass and fossil feedstocks

2.24
co-product
substance or object resulting from a production process not being a product, residue or waste

NOTE 1 to entry: See also product (2.63), residue (2.69) and waste (2.84).

2.25
CO_2 equivalent
unit for comparing the time integral of radiative forcing of a GHG to carbon dioxide

NOTE 1 to entry: The carbon dioxide equivalent is calculated using the mass of a given GHG multiplied by its global warming potential. [ISO 14064-1:2006 [12]]

2.26
criterion
state or property as a means of judging whether or not a principle has been fulfilled

NOTE 1 to entry: See also sustainability criteria (2.77).

2.27
default value
greenhouse gas emission or greenhouse gas emission savings derived from a *typical value* by the application of pre-determined factors, which may be used in place of an *actual value* as specified in applicable regulations

NOTE 1 to entry: As per 2009/28/EC [1].

NOTE 2 to entry: See also actual value (2.3), disaggregated default value (2.28), typical value (2.80).

2.28
disaggregated default value
greenhouse gas emission for a specific part of the supply chain derived from a default value.

NOTE 1 to entry: See also actual value (2.3), default value (2.27), typical value (2.80).

2.29
distribution
set of operations or activities to supply biofuels or bioliquids or their blends from their delivery to the fuel supplier and up to the final customer

2.30
economic operator
individual or organisation which has ownership or physical control of biomass, intermediate products and products produced thereof, from the origin to the market availability of the biofuel or bioliquid for one or several steps in the (biofuel or bioliquid) chain of custody

2.31
ecosystem
dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit

2.32
first-party conformity assessment activity
conformity assessment activity that is performed by the person or organization that provides the object

NOTE 1 to entry: The expression “object of conformity assessment” or “object” is used in this standard to encompass any particular material, product, installation, process, system, person or body to which conformity assessment is applied.

NOTE 2 to entry: Adapted from EN ISO/IEC 17000:2004 [3].

2.33
forest
land spanning more than 1 ha[1)] with trees higher than 5 m and a canopy cover of more than 10 %, or trees able to reach these thresholds in situ, not including land that is predominantly under agricultural or urban land use

NOTE 1 to entry: Forest is determined both by the presence of trees and the absence of other predominant land uses. The trees should be able to reach a minimum height of 5 m in situ.

NOTE 2 to entry: Includes areas with young trees that have not yet reached but which are expected to reach a canopy cover of 10 % and tree height of 5 m. It also includes areas that are temporarily unstocked due to clear cutting as part of a forest management practice or natural disasters, and which are expected to be regenerated within five years. Local conditions may, in exceptional cases, justify that a longer time frame is used.

NOTE 3 to entry: Includes forest roads, firebreaks and other small open areas; forest in national parks, nature reserves and other protected areas such as those of specific environmental, scientific, historical, cultural or spiritual interest.

NOTE 4 to entry: Includes windbreaks, shelterbelts and corridors of trees with an area of more than 0,5 ha and width of more than 20 m.

NOTE 5 to entry: Includes abandoned shifting cultivation land with a regeneration of trees that have, or is expected to reach, a canopy cover of 10 % and tree height of 5 m.

NOTE 6 to entry: Includes areas with mangroves in tidal zones, regardless whether this area is classified as land area or not.

NOTE 7 to entry: Excludes rubber-wood, cork oak and Christmas tree plantations with a fixed rotation cycle.

NOTE 8 to entry: Includes areas with bamboo and palms provided that land use, height and canopy cover criteria are met.

NOTE 9 to entry: Excludes tree stands in agricultural production systems, such as fruit tree plantations, oil palm plantations, short rotation coppice, and agroforestry systems when crops are grown under tree cover.

NOTE 10 to entry: Some agroforestry systems such as the “Taungya” system where crops are grown only during the first years of the forest rotation should be classified as forest.

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1) The FAO source document [13] contains a value of 0,5 ha. The value has been adapted according to the RED [1].

NOTE 11 to entry: Adapted from [13].

2.34
fossil fuel
liquid and gaseous fuel derived from crude oil, natural gas or coal

2.35
fossil fuel comparator
latest available actual average GHG emissions from the fossil part of fuels consumed in the European Union as reported under 98/70/EC [14] and 2009/30/EC [2] or if not available the relevant figure as listed in Annex V part C no. 19 of Directive 2009/28/EC [1]

2.36
fuel
energy carrier intended for energy conversion

NOTE 1 to entry: Fuels are solid, liquid or gaseous.

NOTE 2 to entry: Fuels are in this context fossil fuels, biofuels and bioliquids.

NOTE 3 to entry: As per 2009/28/EC [1].

2.37
global warming potential
GWP
factor describing the radiative forcing impact of one mass-based unit of a given GHG relative to an equivalent unit of carbon dioxide over a given period of time

NOTE 1 to entry: Adapted from ISO 14064-1:2006 [12].

NOTE 2 to entry: GHG values are provided in Directive 2009/28/EC [1].

2.38
greenhouse gas
GHG
gaseous constituent of the atmosphere, both natural and anthropogenic, that absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the earth's surface, the atmosphere, and clouds

NOTE 1 to entry: For the purpose of this standard, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O).

NOTE 2 to entry: Adapted from ISO 14064-1:2006 [12].

2.39
greenhouse gas emission
total mass of a greenhouse gas released to the atmosphere over a specified period of time

NOTE 1 to entry: Combined emissions of different greenhouse gases are commonly expressed in terms of “CO2 equivalents”.

NOTE 2 to entry: Adapted from ISO 14064-1:2006 [12].

2.40
greenhouse gas emission savings
percentage of greenhouse gas emission saved by the use of a biofuel or bioliquid as compared to a fossil fuel comparator

2.41
group auditing
third-party conformity assessment for a group of similar economic operators, in particular for smallholder farmers, producer organisations and cooperatives on the basis of sampling

NOTE 1 to entry: Group auditing for compliance with land related criteria is only acceptable when the areas concerned are near each other and have similar characteristics.

NOTE 2 to entry: Group auditing for the purpose of calculating greenhouse gas savings is only acceptable when the units have similar production systems and products.

2.42
habitat
natural environment that surrounds (influences and is utilized by) a species population

2.43
highly biodiverse natural grassland
grassland that would remain grassland in the absence of human intervention and which maintains the natural species composition and ecological characteristics and processes

2.44
highly biodiverse non-natural grassland
grassland that would cease to be grassland in the absence of human intervention and which is species-rich and not degraded, unless evidence is provided that the harvesting of the raw material is necessary to preserve its grassland status

2.45
indicator
quantitative or qualitative parameter for the assessment of a criterion

2.46
intermediate product
output from a unit process that is input to other unit processes that require further transformation within the system

[SOURCE: EN ISO 14040:2006, 2.23]

2.47
land use
total of arrangements, activities and inputs (a set of human actions) undertaken in a certain land cover type

NOTE 1 to entry: The term land use is also used in the sense of the social and economic purposes for which land is managed (e.g., grazing, timber extraction, and conservation)

2.48
land use change
LUC
change in terms of land cover between the six IPCC land categories (forest land, grass land, crop land, wetlands, settlements and others land), plus a seventh category consisting of perennial crops including (tree) crop plantations

NOTE 1 to entry: The reference date is provided in 2009/28/EC [1].

NOTE 2 to entry: Adapted from [26].

2.49
land with high carbon stock
wetlands; continuously forested areas; land spanning more than one hectare with trees higher than 5 m and a canopy cover of between 10 % and 30 %, or trees able to reach those thresholds in situ

NOTE 1 to entry: See also continuously forested area (2.22), forest (2.33).

2.50
life cycle
consecutive and interlinked stages of a product system, from raw material acquisition or generation from natural resources to final disposal
[SOURCE: EN ISO 14040:2006, definition 2.1]

2.51
lower heating value
LHV
amount of heat released by the complete combustion of a material at atmospheric pressure assuming both the material and all combustion products are at 25 °C and all water, either present in the original material or produced by the combustion, remains in gaseous state

NOTE 1 to entry: The LHV of a wet stream is the difference between the LHV of its dry matter content and the heat required to dry out the material. The following formula may be used:

$$LHV = LHV_{dry} (100 - \%W)/100 - \%W * 2{,}442 /100 \quad (1)$$

where

LHV_{dry} is the LHV of the dry matter expressed in MJ/kg;

$\%W$ is the mass percentage of water in the stream;

2,442 is the latent heat of vaporisation of water at 25°C expressed in MJ/kg [27].

2.52
mass balance
relationship between input and output of a specific substance within a system for chain of custody, in which the output from the system cannot exceed the input into the system

NOTE 1 to entry: Adapted from ISO 6107-3:1993 [15].

NOTE 2 to entry: In Directive 2009/28/EC [1] mass balance refers to the concept of demonstrating that the sum of all consignments withdrawn from the mixture has the same sustainability characteristics, in the same quantities, as the sum of all consignments added to the mixture.

2.53
mass balance system
system of chain of custody in which "sustainability characteristics" remain assigned to "consignments" and which

1) allows consignments of raw material or biofuel with differing sustainability characteristics to be mixed;

2) requires information about the sustainability characteristics and sizes of the consignments referred to in point 1 remains assigned to the mixture; and

3) provides for the sum of all consignments withdrawn from the mixture is described as having the same sustainability characteristics, in the same quantities, as the sum of all consignments added to the mixture.

NOTE 1 to entry: In the mass balance system, each economic operator within an EU member state or third country keeps track of the amount of sustainable biomass, biofuel or bioliquid it sources and the amount of sustainable biomass, biofuel or bioliquid it delivers as defined in prEN 16214-2:2010 [16].

NOTE 2 to entry: The RED mass balance method of the chain of custody applies to production / trading processes where raw material fulfilling the requirements of Directive 2009/28/EC [1] is mixed together with other raw material categories.

2.54
mixture
mix of substances (either agricultural products, intermediate products of biofuels and bioliquids) from different consignments, having any form where consignments would normally be in contact, such as in a container, processing or logistical facility or site and where separate sizes and sustainability characteristics of each consignment remain assigned to the mix of substances

NOTE 1 to entry: See also blending (2.14).

2.55
nutrient balance
balance of nutrients coming into the farming/forestry system (weathering, deposition, fertilizers) with those leaving (harvest, leaching)

2.56
organization
company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration

NOTE 1 to entry: For organizations with more than one operating unit, a single operating unit may be defined as an organization.

[SOURCE: EN ISO 14001:2004, 2.16]

2.57
peatland
area with or without vegetation with a naturally accumulated peat layer at the surface of at least 30 cm in depth

NOTE 1 to entry: Adapted from [18].

NOTE 2 to entry: Peat is sedentarily accumulated material consisting of at least 30% (dry mass) of dead organic material.

NOTE 3 to entry: Peat itself is not considered biomass [26].

2.58
point of collection
point from which waste, agricultural crop residues or residues from processing can be directly used as raw material for biofuel or bioliquid production

NOTE 1 to entry: If an additional recovery process for a waste or residue is required before further use, the material is a waste or residue from processing until the recycling or recovery operation has been completed.

NOTE 2 to entry: The point of collection is the end point of the process of collection mentioned in 2009/28/EC [1].

2.59
primary forest and other primary wooded land
forest and other wooded land of native species where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed

NOTE 1 to entry: As per 2009/28/EC [1].

2.60
principle
fundamental, primary assumption and quality which constitutes a source of action determining particular objectives or results

NOTE 1 to entry: Adapted from ISO/IEC 15944-2:2006 [20].

2.61
process
set of interrelated or interacting activities that transforms inputs into outputs

NOTE 1 to entry: Adapted from EN ISO 9000:2005 [21].

2.62
process chemical
chemical compound used, in the process of conversion of biomass or of an intermediate product.

NOTE 1 to entry: Process chemical may include catalysts, solvents, antifoam agents, etc.

2.63
product
substance, object or energy form that is deliberately produced in a production process and is the primary aim of that process

NOTE 1 to entry: Adapted from [19].

NOTE 2 to entry: Products include goods and services [4].

2.64
product declaration
declaration by the economic operator passed on to the next economic operator in the chain of custody specifying properties and sustainability characteristics (including GHG emission data) of a defined consignment

NOTE 1 to entry: See details in prEN 16214-2 [16].

2.65
protection area
see under *"area for nature protection purposes"*

2.66
raw material
material that is used to produce a product

NOTE 1 to entry: Adapted from EN ISO 14040:2006 [4].

2.67
reagent
compound that takes part in a chemical reaction

2.68
refinery
in the context of GHG emissions allocation, a facility where processing of some of the output streams is interlinked through energy or material feedback loops

2.69
residue
substance or object that is either directly produced by agriculture, fisheries, aquaculture and forestry or resulting from a production process and not being a waste and for which the following conditions have to be met simultaneously:

a) the substance or object was not deliberately produced; and

b) the production process has not been deliberately modified to produce the substance or object; and

c) the substance or object is not the end product that the production process directly seeks to produce.

NOTE 1 to entry: Adapted from [26].

NOTE 2 to entry: The integration of harvesting processes, separation processes or additional related processes (e.g. drying, filling, etc.) necessary for making a residue ready for further use does not constitute a deliberate modification of the production process.

NOTE 3 to entry: For identifying a substance or object as residue refer to Annex A.

2.70
review
verification of the suitability, adequacy and effectiveness of selection and determination activities, and the results of these activities, with regard to fulfilment of specified requirements by an object of conformity assessment

[SOURCE: EN ISO/IEC 17000:2004, 5.1]

2.71
second-party conformity assessment activity
conformity assessment activity that is performed by the person or organization that has a user interest in the object

NOTE 1 to entry: The expression “object of conformity assessment” or “object” is used in this standard to encompass any particular material, product, installation, process, system, person or body to which conformity assessment is applied.

NOTE 2 to entry: Adapted from EN ISO/IEC 17000:2004 [3].

2.72
site
geographical location with precise boundaries within which products can be mixed, including containers, processing and logistical facilities

NOTE 1 to entry: Term is used in the context of mass balance.

NOTE 2 to entry: Adopted from [25].

2.73
soil buffering capacity
capacity of the soil to buffer acidity and thereby neutralizing water on its way to water ecosystems and groundwater

2.74
storage
act of retaining raw materials, intermediate and/or final products, prior to or after processing is completed.

NOTE 1 to entry: Adapted from EN ISO 10417:2004 [23].

2.75
supply chain
linked set of resources and processes that begins with the production of raw material and extends through the manufacturing, processing, handling and delivery of products to the purchaser

NOTE 1 to entry: The supply chain may include vendors, manufacturing facilities, logistics providers, internal distribution centres, distributors, wholesalers and other entities involved in the manufacturing, processing, handling and delivery of the goods and their related services.

NOTE 2 to entry: Adapted from ISO 28001:2007 [22].

2.76
surveillance
systematic iteration of conformity assessment activities as a basis for maintaining the validity of the statement of conformity

[SOURCE: EN ISO/IEC 17000:2004, 6.1]

2.77
sustainability criteria
states or properties as a means of judging whether or not a sustainability principle has been fulfilled

2.78
system boundary
set of criteria specifying which unit processes are part of a product system

[SOURCE: EN ISO 14040:2006, 2.32]

2.79
third-party conformity assessment activity
conformity assessment activity that is performed by a person or organization that is independent from the person or organizations that provide or have a user interest in the object

NOTE 1 to entry: The expression “object of conformity assessment” or “object” is used in this standard to encompass any particular material, product, installation, process, system, person or body to which conformity assessment is applied.

NOTE 2 to entry: Verification is equivalent to third-party conformity assessment activity.

NOTE 3 to entry: Adapted from EN ISO/IEC 17000:2004 [3].

2.80
typical value
estimate of the representative greenhouse gas emission or greenhouse gas emission savings for a particular biofuel production pathway

NOTE 1 to entry: As per 2009/28/EC [1].

NOTE 2 to entry: See also actual value (2.3), default value (2.27), disaggregated default value (2.28).

2.81
undrained peatland
peatland not drained before 1 January 2008 or not affected by previous drainage on 1 January 2008

NOTE 1 to entry: Does not include clearing of ditches or trenches on previously drained peatland.

NOTE 2 to entry: Based on 2009/28/EC [1].

2.82
verifier
source of information or method to quantitatively or qualitatively assess an indicator

NOTE 1 to entry: “Verifier” may also be used for a person who verifies [see ISO 14065:2007, 2.3.8].

2.83
voluntary scheme
set of rules developed by private or public initiative in conformity with the biofuel sustainability requirements, including criteria and methodology required to conduct an approved verification system. It can cover part or the entire sustainability requirements

NOTE 1 to entry: A voluntary scheme will be approved by the European commission.

NOTE 2 to entry: Directive 2009/28/EC [1] specifies a verification system including documentation management, adequate standard of independent auditing and mass balance system.

NOTE 3 to entry: Communication 2010/C 160/01 from the Commission [25] provides detailed background information regarding specifications for a voluntary scheme according to Directive 2009/28/EC [1].

2.84
waste
substance or objects which the holder discards or intends or is required to discard

NOTE 1 to entry: Adapted from EN ISO 14040:2006 [4] and *Communication 2010/C 160/02* [26].

2.85
wetland
land that is covered with or saturated by water permanently or for a significant part of the year

NOTE 1 to entry: Snow and ice during winter conditions does not constitute wetland.

Annex A
(normative)

Guidance on the identification of residues to use

Economic operators should refer to the following information sources, by order of decreasing priority, in order to classify a substance as a residue (or a waste) according to:

a) **EU-legislation**, including the Directive 2009/28/EC [1] and the national legislation transposing this Directive into national law;

b) **Official EC and national guidance documents**, including the European Commission guidelines for the implementation of the sustainability scheme and the information published on the Biofuels transparency platform;

c) Additional guidance provide **definition 2.69** of this standard and/or the **decision tree** of Annex B.

Annex B
(informative)

Decision tree

Before consulting the decision tree as in Figure B.1, follow the hierarchy presented in Annex A.

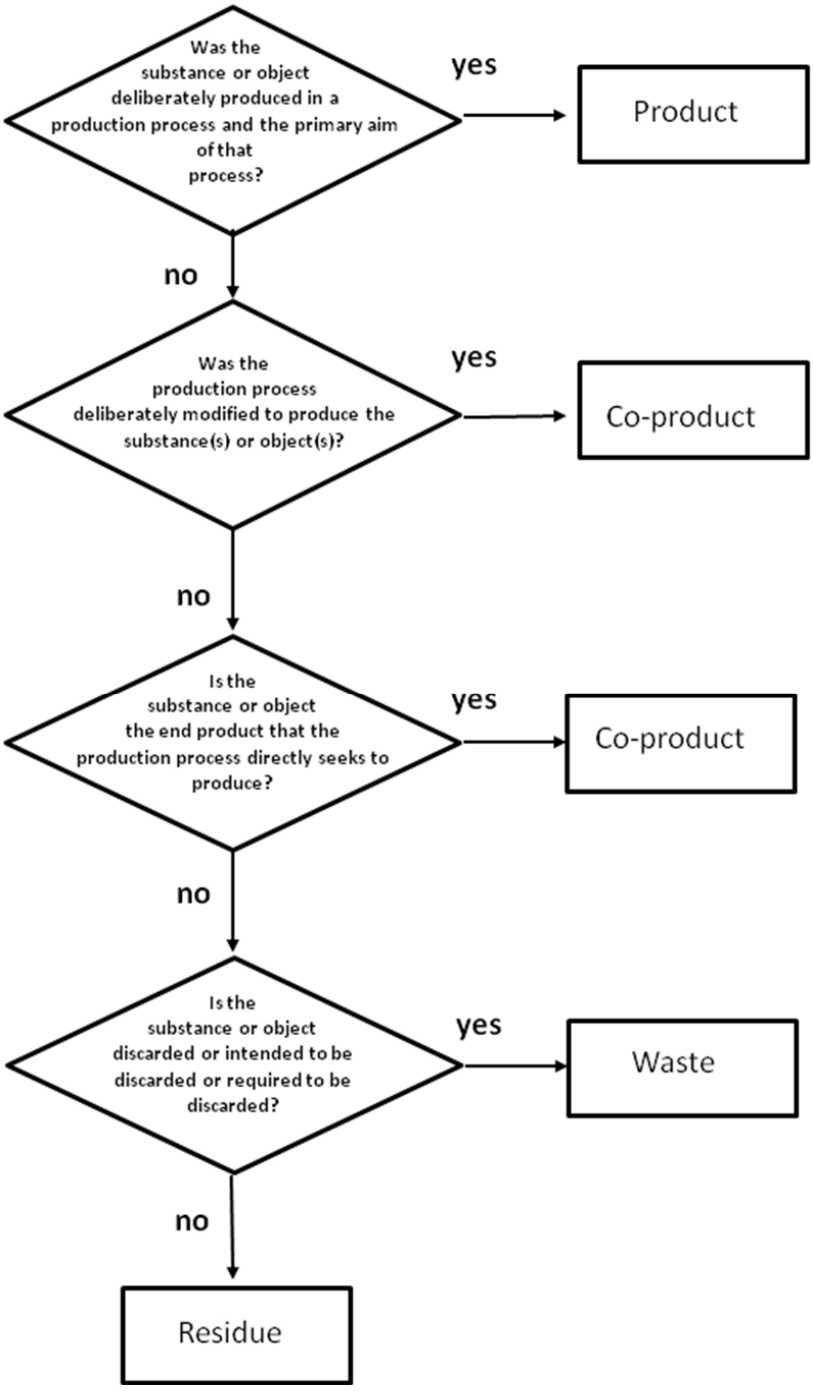

Figure B.1 — Decision tree to differentiate between waste/residue and co-product

Annex C
(informative)

Translation of terms

Table C.1 — Translations of terms used

	English	French	German
1	accreditation	accréditation	Akkreditierung
2	accreditation body	organisme d'accréditation	Akkreditierungsstelle
3	actual value	valeur réelle	tatsächlicher Wert
4	agro-biodiversity	agrobiodiversité	Agrobiodiversität/landwirtschaftliche biologische Vielfalt
5	allocation	allocation	Allokation
6	area for nature protection purposes	zone de protection de la nature	Fläche für Naturschutzzwecke
7	audit	audit	Audit
8	biofuel	biocarburant	Biokraftstoff (Biomassekraftstoff)
9	biofuel production	production de biocarburant	Herstellung von Biokraftstoff (Biomassekraftstoff)
10	biofuel producer	producteur de biocarburant	Hersteller von Biokraftstoff (Biomassekraftstoffe)
11	bioliquid	bioliquide	flüssiger Biobrennstoff
12	bioliquid production	production de bioliquide	Herstellung von flüssigem Biobrennstoff
13	biomass	biomasse	Biomasse
14	blending	incorporation	Mischen
15	certificate	certificat	Zertifikat
16	chain of custody	chaîne de surveillance	Überwachte Lieferkette
17	combined heat and power / CHP	production combinée de chaleur et d'électricité	Kraft-Wärme-Kopplung/KWK
18	conformity assessment	évaluation de la conformité	Konformitätsbewertung
19	conformity assessment body	organisme d'évaluation de la conformité	Konformitätsbewertungsstelle
20	consignment	lot	Lieferung
21	continuously forested	zone forestière continue	kontinuierlich bewaldete Gebiete
22	conversion area	conversion	Umwandlung
23	co-processing	cotraitement	gemeinsame Verarbeitung
24	co-product	coproduit	Nebenprodukt/ Nebenerzeugnis
25	CO_2 equivalent	équivalent CO2	CO2-Äquivalent
26	criterion	critère	Kriterium
27	default value	valeur par défaut	Standardwert
28	disaggregated default value	valeur par défaut détaillée	disaggregierter Standardwert
29	distribution	distribution	Verteilung
30	economic operator	opérateur économique	Wirtschaftsteilnehmer
31	ecosystem	écosystème	Ökosystem
32	first-party conformity assessment activity	activité d'évaluation de la conformité par première partie	Konformitätsbewertung durch eine erste Seite
33	forest	forêt	Wald
34	fossil fuel	combustible fossile	fossiler Brennstoff/fossiler Kraftstoff

	English	French	German
35	fossil fuel comparator	valeur du combustible fossile de référence	Vergleichswert für fossile Brennstoffe
36	fuel	carburant	Brennstoff
37	global warming potential / GWP	potentiel de réchauffement global / PRG	Treibhauspotential/Klimawirksamkeit/GWP
38	greenhouse gas / GHG	gaz à effet de serre / GES	Treibhausgas/THG
39	greenhouse gas emission	émission de gaz à effet de serre	Treibhausgasemission
40	greenhouse gas emission savings	réductions des émissions de gaz à effet de serre	Einsparungen an Treibhausgasemissionen
41	group auditing	audit de groupe	Gruppen-Audit
42	habitat	habitat	Lebensraum
43	highly biodiverse natural grassland	prairies naturelles présentant une grande valeur sur le plan de la biodiversité	natürliches Grünland mit großer biologischer Vielfalt
44	highly biodiverse non-natural grassland	prairies non naturelles présentant une grande valeur sur le plan de la biodiversité	künstlich geschaffenes Grünland mit großer biologischer Vielfalt
45	indicator	indicateur	Indikator
46	intermediate product	produit intermédiaire	Zwischenerzeugnis/Zwischenprodukt
47	land use	affectation des sols	Landnutzung/Flächennutzung
48	land use change / LUC	changement dans l'affectation des sols	Landnutzungsänderung/Flächennutzungsänderung
49	land with high carbon stock	terres présentant un important stock de carbone	Flächen mit hohem Kohlenstoffbestand
50	life cycle	cycle de vie	Lebensweg
51	lower heating value / LHV	pouvoir calorifique inférieur / PCI	unterer Heizwert/LHV
52	mass balance	bilan massique	Massenbilanz
53	mass balance system	système de bilan massique	Massenbilanzsystem
54	mixture	mélange	Gemisch
55	nutrient balance	bilan des éléments nutritifs	Nährstoffbilanz
56	organisation	organisme	Organisation
57	peatland	tourbière	Torfmoor
58	point of collection	point de collecte	Sammelstelle
59	primary forest and other primary wooded land	forêt primaire et autres surfaces boisées primaires	Primärwald und andere naturbelassene bewaldete Flächen
60	principle	principe	Grundsatz
61	process	processus	Prozess
62	process chemical	produit chimique de processus	Prozesschemikalie
63	product	produit	Produkt/Erzeugnis
64	product declaration	déclaration relative au produit	Produktdeklaration
65	protection area	aire protégée	Schutzgebiet
66	raw material	matière première	Rohstoff
67	reagent	réactif	Reagens
68	refinery	raffinerie	Raffinerie

	English	French	German
69	residue	résidu	Reststoff
70	review	revue	Bewertung
71	second-party conformity assessment activity	activité d'évaluation de la conformité par seconde partie	Konformitätsbewertung durch eine zweite Seite
72	site	site	Standort
73	soil buffering capacity	pouvoir tampon d'un sol	Puffervermögen des Bodens
74	storage	stockage	Lagerung
75	supply chain	chaîne d'approvisionnement	Lieferkette
76	surveillance	surveillance	Überwachung
77	sustainability criteria	critères de durabilité	Nachhaltigkeitskriterien
78	system boundary	frontière du système	Systemgrenze
79	third-party conformity assessment activity	activité d'évaluation de la conformité par tierce partie	Konformitätsbewertung durch eine dritte Seite
80	typical value	valeur type	typischer Wert
81	undrained peatland	tourbière non drainée	nicht entwässertes Torfmoor
82	verifier	vérificateur	Prüfer
83	voluntary scheme	schéma volontaire	freiwillige Regelung
84	waste	déchet	Abfall
85	wetland	zones humides	Feuchtgebiet

Annex D
(informative)

A–deviations

A- deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN-CENELEC member.

This European Standard does not fall under any Directive of the EU in the sense that it has been mandated. However, both the EC and CEN agreed that this European Standard may play a role in the implementation of the EU biofuel and bioliquid sustainability scheme. In the relevant CEN countries these A- deviations are valid instead of the provisions of the European Standard until they have been removed.

Deviation	
Country Sweden	 Ordinance 2010:1532, 5th paragraph
term 2.48 land use change	The Swedish ordinance for sustainability criteria for biofuels and bioliquids states that there are six land categories that are considered when calculating greenhouse gas emissions due to land use change ; these are forest land, grass land, crop land, wetlands, settlements and other land. There is no seventh land category as in this European Standard.
Sweden	STEMFS 2011:2 Kap.3 3 § (chapter 3, 3rd paragraph)
term 2.54 mixture	The Swedish ordinance for sustainability criteria for biofuels and bioliquids allows the occurrence of mixing of consignments at all sites where the economic operator has a tax warehouse and all of these warehouses can be considered as one site for mass balance purposes. This European Standard links mixtures to locations where products "would normally be in contact".
Sweden	Law 2010:598 kap 1, 2§ (chapter 1, 2nd paragraph)
term 2.69 residue	The Swedish law explains the definition as follows: residues can only be considered a residue if the process is not changed either by producing more of the residue material or by giving the residue material other properties, **at the expense of the main product**. This last requirement has not been copied in this European Standard. A similar intention is incorporated in the term and has been clarified by a note.

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